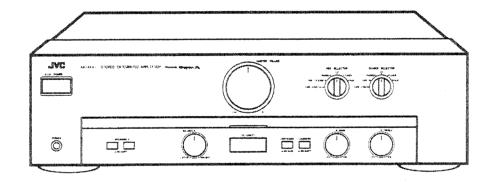


JVE

SERVICE MANUAL

STEREO INTEGRATED AMPLIFIER

AX-A441TN MODEL No. AX-A442BK



Contents

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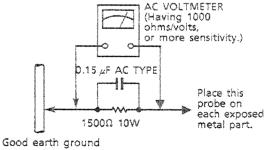
- Safety Precautions -

- 1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
- 2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
- 3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
- 4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
- 5. Leakage currnet check (Electrical shock hazard testing)
 After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
 - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularily any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
 - Alternate check method
 Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Do not use a line isolation transformer during this check.

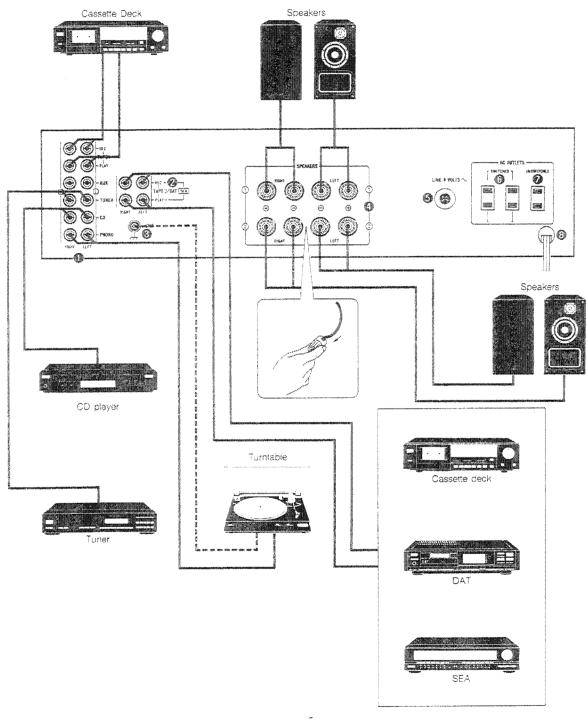
Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



- Warning -

- 1. This equipment has been designed and manufactured to meet international safety standards.
- 2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- 3. Repairs must be made in accordance with the relevant safety standards.
- 4. It is essential that safety critical components are replaced by approved parts.
- 5. If mains voltage selector is provided, check setting for local voltage.

CONNECTION DIAGRAM



REAR PANEL

- TAPE 1, AUX, TUNER, CD and PHONO terminals
- ▼ TAPE 2/DAT terminals
- GND terminal

If your turntable has a ground lead, connect it to the GND terminal.

- SPEAKERS 1, 2 terminals
- ♠ AC line voltage selector** (LINE ↓ VOLTS ~)

Set the voltage selector so that the arrow points to the appropriate voltage.

- SWITCHED AC OUTLETS**
- O UNSWITCHED AC OUTLETS**
- ** Not provided on units for Continental Europe, the United Kingdom and Australia.
- Power card

Notes:

- 1. Disconnect the power cord when connecting any component.
- When connecting components, make the correct left and right channel connections. Reversed channels may degrade the stereo effect
- Connect speakers with correct polarity: (+) to (+) and (-) to (-). Reversed polarity will degrade the stereo effect.
- 4. Connect plugs or wires firmly. Poor contact may result in hum.
- Do not connect equipment requiring more than the rated power to the AC outlets on the rear panel.
- Use speakers with the correct impedance. The correct impedance is indicated on the rear panel of the AX-A341TN/AX-A342BK, AX-A441TN/AX-A442BK.
- The SWITCHED AC OUTLETS are switched off when the frontpanel POWER button is switched off.
- The UNSWITCHED AC OUTLET is not switched off when the front-panel POWER button is switched off.
- An MC or MM cartridge can be used for the turntable connected to the AX-A441TN/AX-A442BK.
- 10. Do not connect video signals to the terminal of this unit.

HEEOGEEUSE

1. Installation

- Select a place which is level, dry and neither too hot nor too coid (between -5°C and 40°C/23°F and 104°F).
- Leave space between the rear of the amplifier and the wall. Good ventilation is needed, especially when the amplifier is driven at high output power. Also, leave space above the top of the amplifier for the same reason when stacking components.
- Do not allow a carpet, etc., to block the ventilation holes.
- Do not set it in a place subject to vibrations.

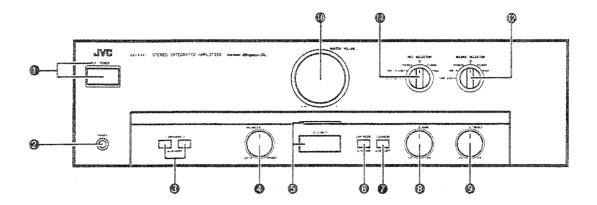
2. Power cord

- Check that the amplifier is set for your local supply voltage and frequency. If not consult the dealer from whom your bought it.
- When unplugging from the wall outlet, always pull the plug, not the power cord.
- Before plugging the power cord into an AC outlet, check to be sure the individual component are connected correctly.

3. Malfunctions, etc.

- There are no user servicable parts inside, if anything goes wrong, unplug the power cord and consult your dealer.
- Do not insert any metallic object inside the amplifier.
- · Do not allow water to get inside the amplifier.
- · Set the volume at minimum, before operation.

FRONT PANEL



O POWER and indicator

Press this button to turn the power on.

To turn the power off, press it again.

The indicator lights when the POWER button is pressed to on.

PHONES (Headphones jack)

Plug stereo headphones into this jack for private listening. If you want to listen to sound from the headphone only, press the SPEAKERS button to "OFF".

SPEAKERS (_ ON I OFF)

Press to switch the speakers connected to the SPEAKERS 1 or 2 terminals on (_) and off (_).

BALANCE

Balances the volume between the left and right speakers. Usually set it to the center click position.

CD DIRECT and indicator

Press this button to enjoy listening to the CD with good sound quality. The indicator lights and the signal fed from the CD terminals is directly connected to the volume, bypassing the circuits on the way, thus allowing you to enjoy listening to an improved sound quality.

Please note:

- When CD DIRECT is on the amplifier gives priority to the CD player so that the CD sound is emitted from the speakers or headphones regardless of the source selected by the source selector.
- White the CD DIRECT button is pressed, spinning of the BALANCE knob does not change the reproduced sound.

CARTRIDGE (AX-A441TN/AX-A442BK only)

MC (_): Press in when using an MC cartridge having an output of less than 0.5 mV.

MM (I): Press again when using an MM or MC cartridge having an output of more than 0.5 mV.

● LOUDNESS (_ ON M OFF)

Press this switch ON (_) to compensate for the ear's different sensitivity to sound at low volumes.

@ BASS

Turn clockwise to boost bass response and counterclockwise to decrease it.

() TREBLE

Turn clockwise to boost treble response and counterclockwise to decrease it.

● MASTER VOLUME

Controls the volume of the speakers and headphones.

REC SELECTOR

TAPE 2/DAT ► 1: Set to this position to dub from TAPE 2 to TAPE 1 or to record DAT onto TAPE 1.

TAPE 1 ▶ 2/DAT: Set to this position to dub from TAPE 1 to TAPE 2 or to record TAPE 1 onto DAT.

PHONO: Set to this position to record PHONO.

CD: Set to this position to record CD

TUNER: Set to this position to record TUNER.

AUX: Set to this position to record the source connected to the

AUX terminals.

SOURCE SELECTOR

TAPE 2/DAT: Set to this position to listen to TAPE 2/DAT.

TAPE 1: Set to this position to listen to TAPE 1.

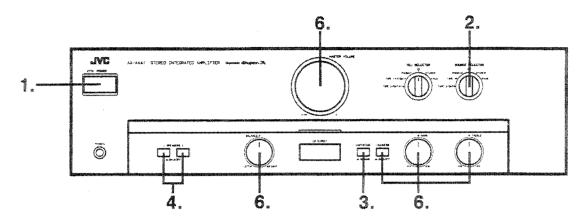
PHONO: Set to this position to listen to PHONO.

CD: Set to this position to listen to CD.

TUNER: Set to this position to listen to TUNER.

AUX: Set to this position to listen to the source connected to the AUX terminals.

Listening to Sources



1. Turn the POWER on and the indicator will light up



2. Adjust the SOURCE SELECTOR to select the source.



3. Set the CARTRIDGE as required. (for PHONO only)

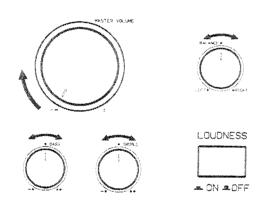


Note:

- Unless listening to PHONO, above operation is not necessary.
- 4. Select the speaker system with the SPEAKERS buttons.



- **5.** Operate the corresponding equipment according to its instruction manual.
- **6.** Adjust the MASTER VOLUME, BALANCE, TREBLE, BASS and LOUDNESS.



7. Use of S.E.A. Graphic Equalizer

By allowing you to independently boost or lower the response of finely divided sections of the frequency spectrum: the S.E.A. gives you much greater control over the sound quality of your stereo system. With an optionally available S.E.A. Graphic Equalizer, you can tailor the sound to your own taste for different types of music or to compensate for the particular accustic characteristics of your audio components and listening room. The TAPE 2/terminals of the AX-A341TN/AX-A342BK or AX-A441TN/AX-A442BK can be used for connecting the S.E.A. Graphic Equalizer.

Note:

 To tailor the sound using SEA, select desired source by the REC SELECTOR and adjust the SOURCE SELECTOR position to TAPE 2/DAT connected to SEA.

TROUBLESHOOTING

What appears to be a malfunction may not always be serious. Make sure first

No sound and no light

is the AC plug connected properly? Are the connections made correctly? Are the inter-component connections correct? No sound from speakers

Are speaker cords connected? Are the SPEAKERS buttons correctly set?

is the VOLUME control properly set?

Is your source component correctly set?

Sound from one speaker only

Are speaker cords connected correctly? Is BALANCE control set to one extreme or the other?

Loud hum during record playing

Is turntable grounded?

Try to change cord path.

Insert the plugs by interchanging their positions.

Howling noise during record playing

Is turntable too close to a speaker?

SPECIFICATIONS

AX-A341TN/AX-A342BK OVERALL CHARACTERISTICS

Output power:

85 watts per channel into 4 ohms at 1 kHz (DIN).

65 watts per channel into 8 phms at 1 kHz (DIN)

55 watts per channel, min, RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion.

55 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003% total harmonic distortion. (measured by JVC Audio Analyzer System)

Total harmonic distortion : 0.007% (20 Hz - 20 kHz, 8 ohms) at

55 watts

Intermodulation distortion : 0.007% (60 Hz : 7 kHz = 4 : 1,

8 ohms) at 55 watts 5 Hz — 50 kHz (IHF, 0.05%, 8 chms Power band width

both channels driven)

5 Hz - 100 kHz +0. -3 dB (8 ohms) Frequency response

Damping factor : 100 (1 kHz, 8 ohms)

Input terminals

Input sensitivity/impedance (1 kHz)

PHONO 2.5 mV/47 kohms CD/AUX/TUNER/TAPE 1, 2 : 200 mV/27 kohms Signal-to-noise ratio PHONO 73 dB ('66 IHF)

CD/AUX/TUNER/TAPE 1, 2 :

110 dB ('66 IHF) PHONO 69 dB (DIN) CD/AUX/TUNER/TAPE 1, 2 : 74 dB (DIN)

TREBLE: ±8 ±1 dB (at 10 kHz) BASS: ±8 ±1 dB (at 100 Hz) Tone controls

Loudness controls : +6 dB (at 100 Hz), +4 dB (at 10 kHz) (Volume control at

- 30 dB position)

EQUALIZER

PHONO overload capacity

(PHONO to TAPE 2 REC) : 100 mV (0.02% THD) PHONO RIAA deviation : ±0.3 dB (20 Hz - 20 kHz)

Recording output

Output level/impedance TAPE 1, 2, REC : 200 mV/800 ohms

GENERAL

: 435 (W) x 127 (H) x 306 (D) mm (17-3/16" x 5" x 12-1/16") **Dimensions**

: 7.2 kg (15.9 lbs.)

Design and specifications subject to change without notice.

AX-A441TN/AX-A442BK OVERALL CHARACTERISTICS

Output power

110 waits per channel into 4 ohms at 1 kHz (DIN).

75 watts per channel into 8 ohms at 1 kHz (DIN).

65 watts per channel, min. RMS, both channels driven, into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007% total harmonic distortion.

65 watts per channel, min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.003% total harmonic distortion. (measured by JVC Audio Analyzer System)

Total harmonic distortion : 0.007% (20 Hz -- 20 kHz, 8 ohms) at

65 watts

0.007% (60 Hz + 7 kHz = 4 + 1) Intermodulation distortion

8 ohms) at 65 watts

5 Hz - 50 kHz (IHF, 0.05%, 8 ohms Power band width

both channels driven)

Frequency response Damping factor : 5 Hz - 100 kHz +0. -3 dB (8 ohms)

100 (1 kHz, 8 ohms)

Input terminals

input sensitivity/impedance (1 kHz)

PHONO (MM) 2.5 mV/47 kohms PHONO (MC) : CD/AUX/TUNER/TAPE 1, 2 : $200 \, \mu V/100 \, \text{ohms}$ 200 mV/27 kahms Signal-to-noise ratio PHONO (MM)

85 dB ('66 IHF) 67 dB ('66 IHF) PHONO (MC) CD/AUX/TUNER/TAPE 1, 2 : 110 dB ('66 lHF) PHONO (MM) 69 dB (DIN) CD/AUX/TUNER/TAPE 1, 2 : 74 dB (DIN)

TREBLE: ±8 ±1 dB (at 10 kHz) BASS: ±8 ±1 dB (at 100 Hz) Tone controls

Loudness controls : +6 dB (at 100 Hz) +4 d8 (at 10 kHz)

(Volume control at -30 dB position)

FOLIAL IZER

PHONO overload capacity (PHONO to TAPE 2 REC) PHONO (MM) 100 mV (0.02% THD) PHONO (MC) 8 mV (0.04% THD)

PHONO RIAA deviation PHONO (MM) PHONO (MC) \pm 0.3 dB (20 Hz - 20 kHz) \pm 0.5 dB (20 Hz - 20 kHz)

Recording output

Output level/impedance TAPE 1, 2, REC

: 200 mV/800 ohms

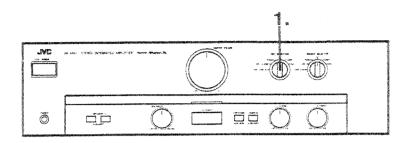
GENERAL

435 (W) x 127 (H) x 306 (D) mm (17-3/16" x 5" x 12-1/16") Dimensions

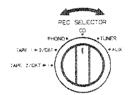
: 7.5 kg (16.6 lbs.) Weight

Design and specifications subject to change without notice.

Recording Tapes



1. Set the REC SELECTOR as desired.



- 2. Play the source according to its instruction manual.
- 3. Operate the tape deck for recording.

Notes:

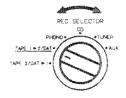
- To listen to another source while recording, select desired source by the SOURCE SELECTOR.
- If your tape deck is 3-head type, you can monitor the sound being recorded. In this case, adjust the SOURCE SELECTOR position to TAPE 1 or TAPE 2/DAT onnected to tape deck.

Tape Dubbing

Dubbing between TAPE 1 and TAPE 2 is carried out as follows:

- To record from TAPE 1 to TAPE 2 -

1. Set the REC SELECTOR to TAPE 1 ▶ 2/DAT.

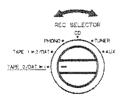


Play back the deck TAPE 1 and operate the deck TAPE 2 for recording.

Note:

 To monitor the recorded sound, connect 3 head-deck to TAPE 2/DAT terminal and set the source selector to TAPE 2. — To record from TAPE 2 to TAPE 1 —

1. Set the REC SELECTOR to TAPE 2/DAT ▶ 1.



Play back the deck TAPE 2 and operate the deck TAPE 1 for recording.

Note:

 To monitor the recorded sound, connect 3 head-desk to TAPE 1 terminal and set the source selector to TAPE 1.

Disassembly Procedures

(1) Removing the Top Cover

- 1. Remove the 4 screws fastening both sides of the Top Cover, and the 2 screws fastening the rear sides.
- 2. Remove the Top Cover.

(2) Removing the Bottom Cover

- 1. Remove the 18 screws (Fig 2)
- 2. Remove the Bottom Cover.

(3) Removing the Front Panel

- 1. Remove the top cover.
- 2. Remove the 3 screws® and 3 plastic rivets®. (Fig 1,2)
- Pull out the main volume knob.

(4) Removing the Power Transistor

- 1. Remove the top cover and the bottom plate.
- 2. Unsolder the defective power transistor.
- 3. Remove the screw holding the power transistor using a pair of pliers, a wrench or a bent screwdriver

(5) Removing / Installing the flexible wire of remote switch

- Set the SOURCE SELECTOR knob (REC SELECTOR knob) to AUX position when removing.
- Insert the tip of the driver into the openings in the switch.(Fig 3)
- Move the driver down so that the claws of the switch open.
- After opening both claws, lift the mold portion.
 Note: Be most careful when handling the flexible wire.
 Do not bend it sharply or twist it.
- 5. Set the SOURCE SELECTOR knob (REC SELECTOR knob) to AUX position of switch to ① (or ②) direction , then install the mold portion .

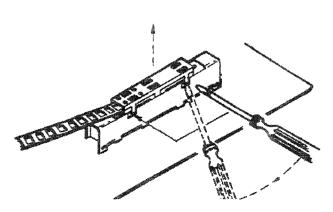
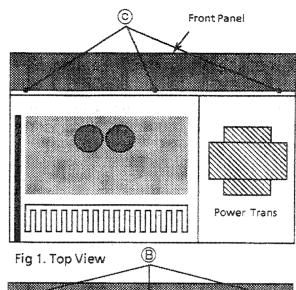
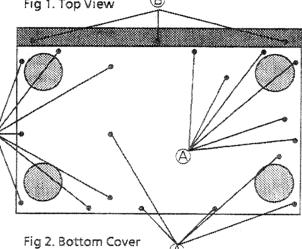


Fig 3. Removing the flexible wire of remote switch.





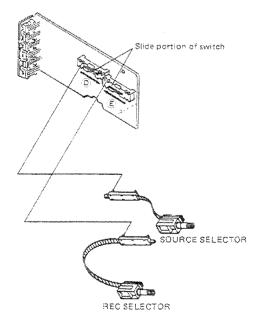


Fig 4. Installing the flexible wire of remote switch.

POWER SPECIFICATIONS

	3 to 3 foliance 20 Francisco	Power Co	Power Conumption	
Area	Line Voltage & Frequency	AX-A341TN/AX-A342BK	AX-R441TN/AX-A442BK	
U.K.	→ AC 240 V ∼ . 50 Hz	250 watts	610 watts	
Australia	7 AC 240 V 70, 50 ftz	250 Walls	O IU Walls	
Continental Europe	AC 230 V ∼, 50 Hz	240 watts	250 watts	
Other areas	AC 110 / 127 / 220 / 240 V	230 watts	270 watts	

SPANNUNGSVERSORGUNG UND LEISTUNGSAUFNAHME

12		Leistungs	Leistungsaufnahme		
Länder	Netzspannung und Frequenz	AX-A341TN/AX-A342BK	AX-A441TN/AX-A442BK		
Großbritannien	- 240 V ∕ . 50 Hz	250 Watt	610 Wati		
Australie	7 240 V 10, 30 Hz	250 Wall	UIU 94au		
Kontinental-Europa	230 V ∼, 50 Hz	240 Watt	250 Watt		
Andere Länder	umschaltbar 110 / 127 / 220 / 240 V \sim 50/60 Hz	230 Watt	270 Watt		

CARACTERISTIQUES TECHNIQUES D'ALIMENTATION

A	Tanian d'alimentation et Erécuence	Consommation		
Pays	Tension d'alimentation et fréquence	AX-A341TN/AX-A342BK AX-A441TN/AX-A442		
Royaume-Uni	CA 240 V 🗘 50 Hz	250 watts	610 watts	
Australie	CA 240 V 0, 30 N2	200 Walls	0.0 wans	
Europe Continentale	CA 230 V ∼, 50 Hz	240 watts	250 watts	
Autres Pays	CA 110 / 127 / 220 / 240 V ∼ , commutable, 50/60 Hz	230 watts	270 watts	

SPANNINGSVEREISTEN

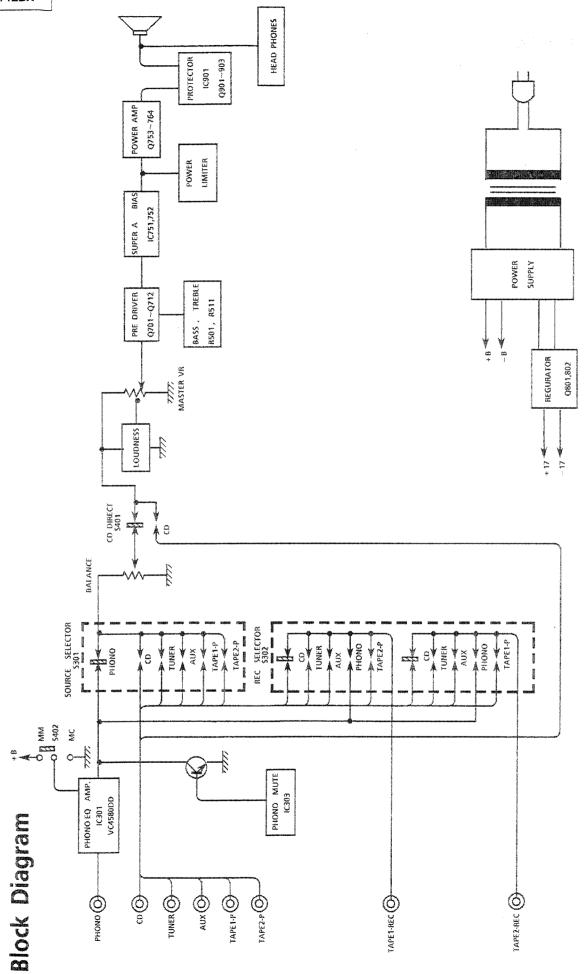
Cabiadas	Makeu amaine an Serimontia	Stroom	Stroomverbruik		
Gebieden	Netspanning en frekwentie	AX-A341TN/AX-A342BK	AX-441TN/AX-A442BK		
Engeland	Net 240 V	250 Wart	610 Watt		
Australië	1 (vet 240 v 1 0 50 mz	250 Wall	O:O yyau		
Europese vasteland	Net 230 V	240 Watt	250 Watt		
Andere gebieden	Net 110 / 127 / 220 / 240 V 🔷 instelbaar, 50/60 Hz	230 Watt	270 Watt		

ESPECIFICACIONES DE ALIMENTACION

Paises	Voltaje v frecuencia	Consumo		
raises	Voltaje y necuciicia	AX-A341TN/AX-A342BK		
Reino Unido	AC 240 V ↑ 50 Hz	250 vatios	610 vatios	
Australia	AO 240 V 10, 30 BZ	200 valios	UTO VALIOS	
Europa Continentai	AC 230 V	240 vatios	250 vatios	
Otras paises	AC 110 / 127 / 220 / 240 V \sim seleccionable, 50/60 Hz	230 vatios	270 vatios	

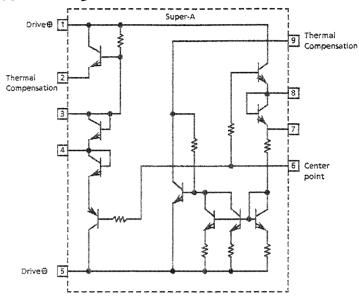
STRÖMFÖRSÖRJNING

Områden	Nätspänning & frekvens	Effektförbrukning		
Omraden	Matspaining & nexvens	AX-A341TN/AX-A342BK		
Storbritannien	- ∼240 V. 50 Hz	250 Watt	610 Watt	
Australien	~ ~~240 v, du mz	250 vvali	DIO Man	
Kontinentaleuropa	∼230 V, 50 Hz	240 Watt	250 Watt	
Övriga länder		230 Watt	270 Watt	

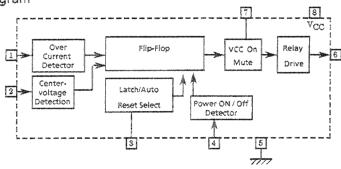


Internal Block Diagrams of ICs

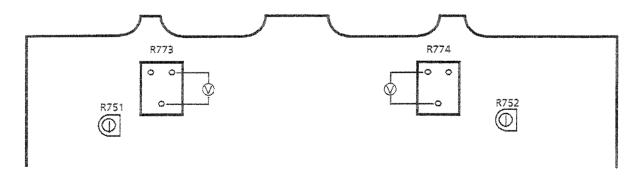
- ₩ VC5022 (IC751,752): SUPER- A
 - (1) Terminal Layout
 - 1 2 3 4 5 6 7 8 9
- (2) Block Diagram



- μPC1237HA(IC303,901): Protector, Relay Driver
 - (1) Block Diagram



Power Amplifier Adjustment Procedures

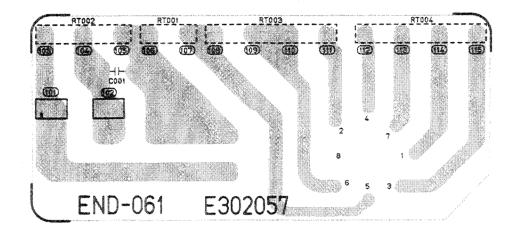


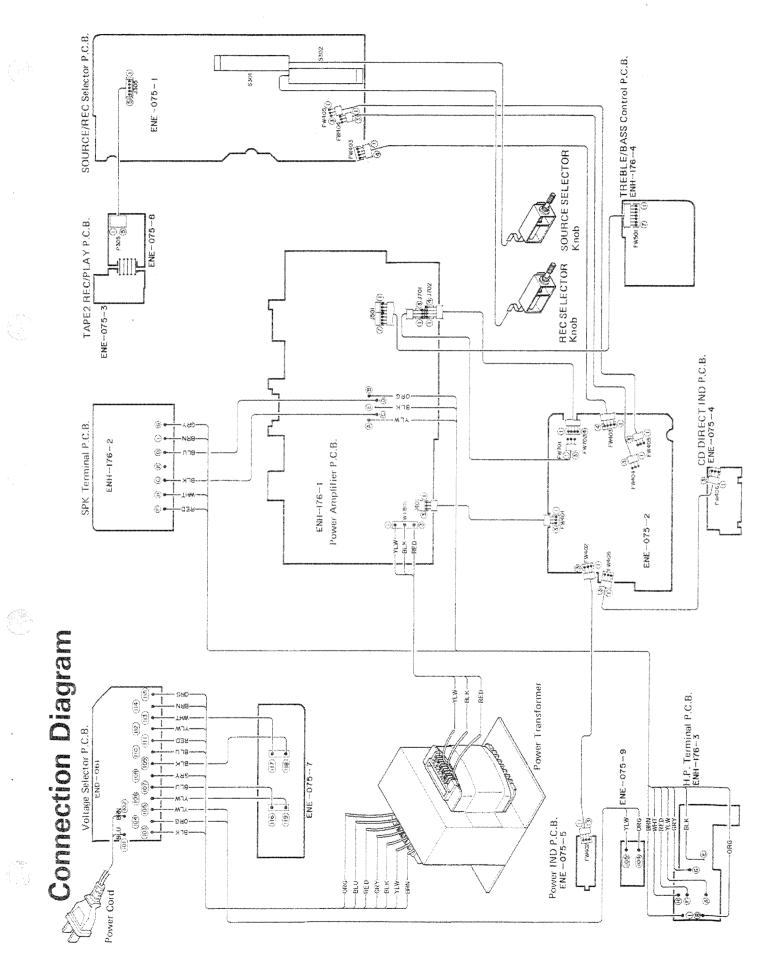
■ Idling Current

- (1) Set the volume control to minimum during this adjustment.
- (2) Turn R751 and R752 fully counterclockwise before the power switch on.
- (3) Always start from cold, and allow 10 minutes to warm up before adjustment. If the heatsink is already warm from previous use the correct adjustment can not be made.
- (5) Connect a DC voltmeter to R773 resistor's leads for left channel, or to R774 for right channel.
- (6) Adjust R751 for left channel, or 752 for right channel, so that the DC voltmeter becomes $7mV \sim 15mV$

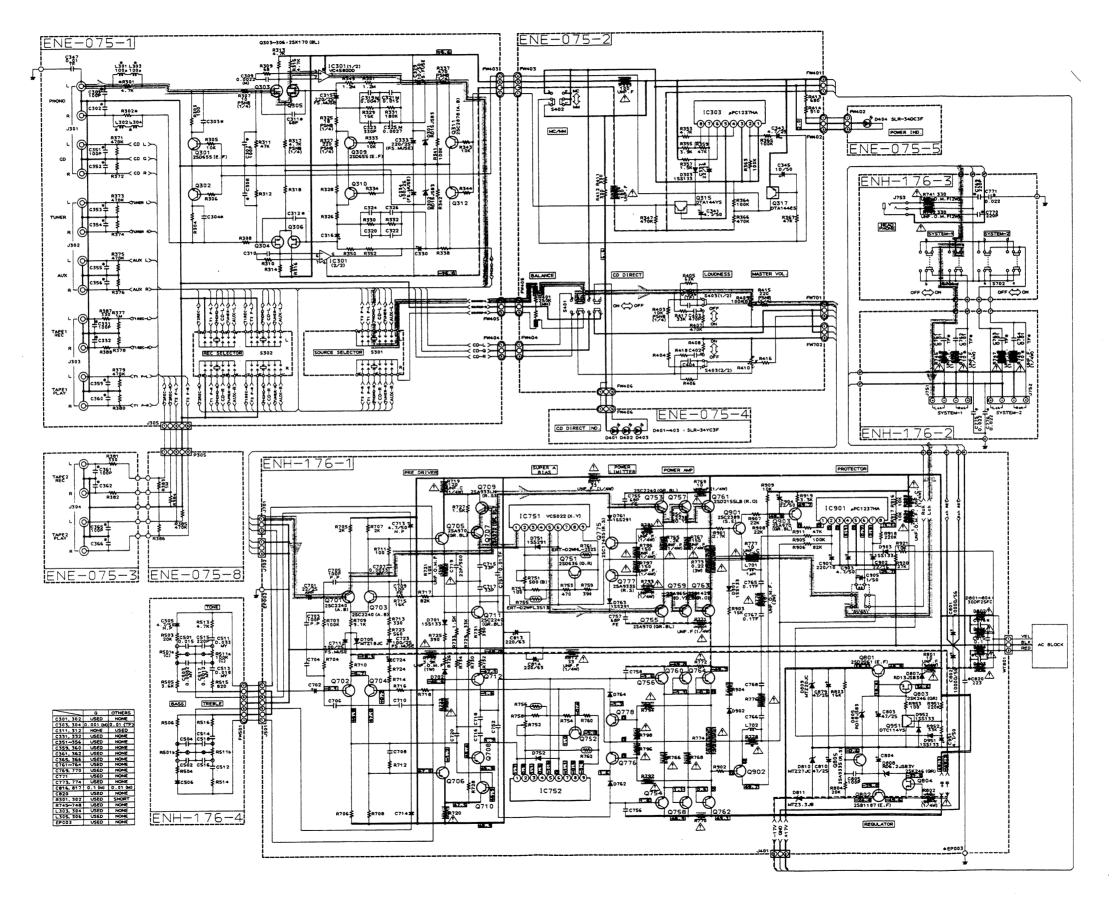
Printed Circuit Boards

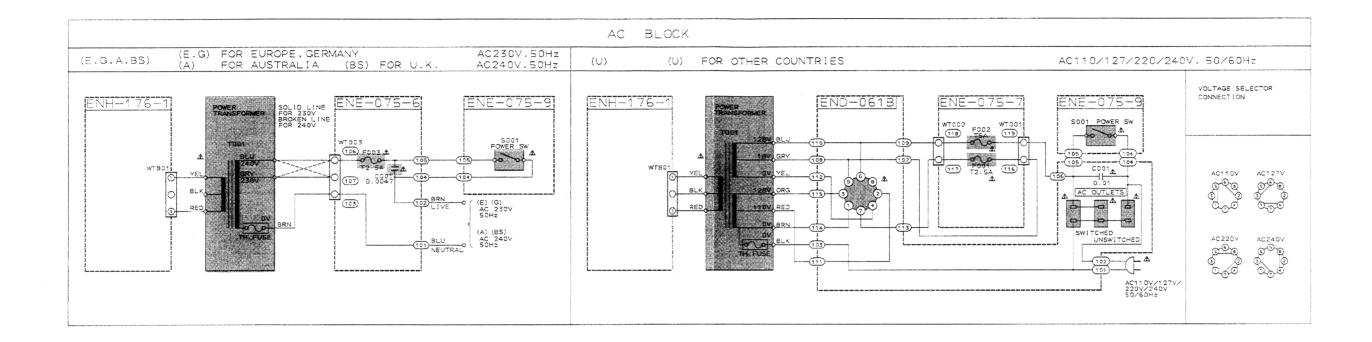
■ Voltage Selector P.C.B (END-061)





Schematic Diagrams

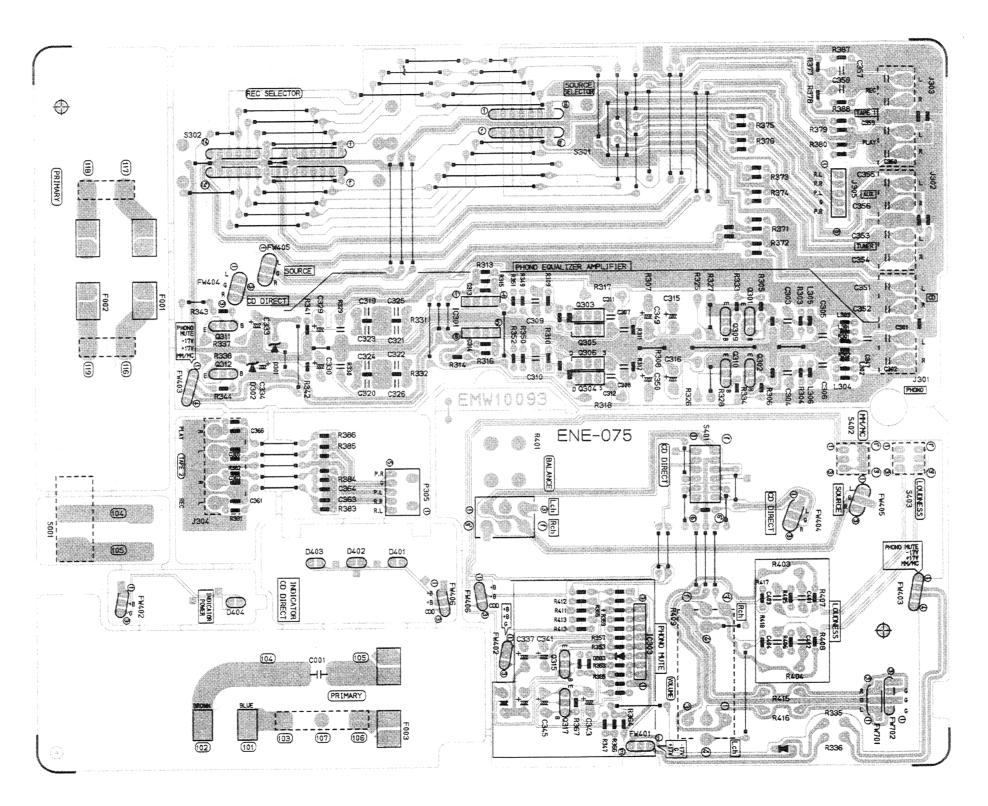




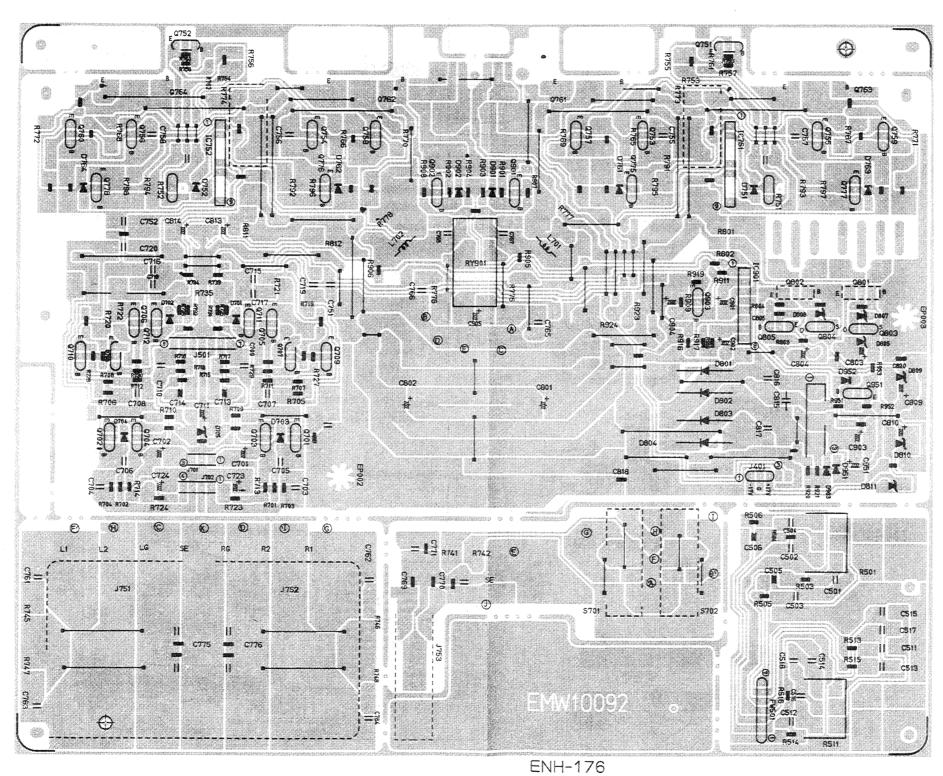
Notes:

- 1. indicates +B power supply.
- 2. --- indicates -B power supply.
- indicates signal path.
- 4. shows voltage.
- When replacing the parts in the darkened area () and those marked with one because to use the designated parts to ensure safety.
 - This is the standard circuit diagram.
- 6. The design and contents are subject to change without notice.

Source Selector & Power Primary P.C.B (ENE-075)



Power Amp P.C.B (ENH-176)

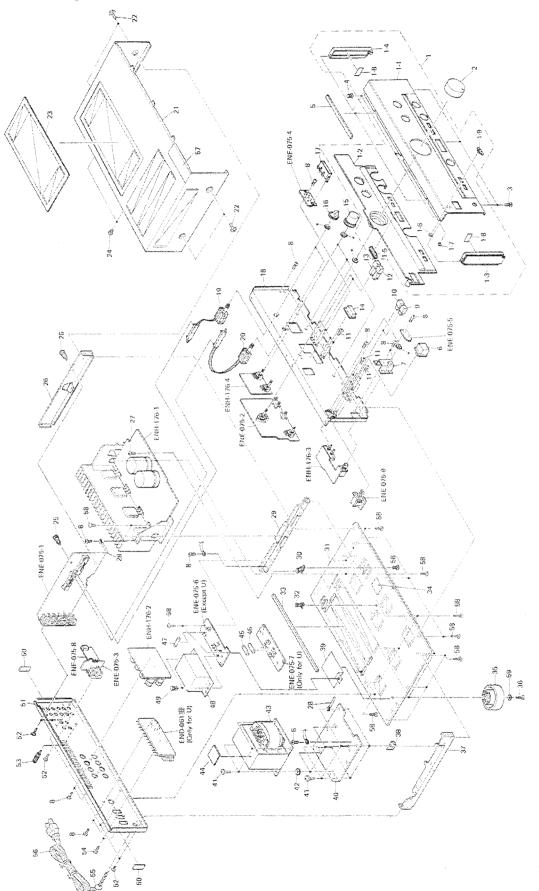


PARTS LIST

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General Exploded View and Parts List



* mark indicates attached part.

■AX-A441TN Parts List

Δ	Item	Part Number	Part Name	Q'ty	Description	Areas
	1 1-1 1-2 1-3 1-4	EFP-AXA441TNE E207078-001 E102418-001 E307424-001 E307424-002	Front Panel Ass'y Front Panel Front Base Side Fitting Side Fitting	1 1 1 1 1	Left Right	
	1-5 1-6 1-7 1-8 1-9	E406486-001 E60912-003 E75934-002 EXO020010R15S13 E72968-001	Indicator Speed Nut Indicator Spacer JVC Mark	1 1 1 2 1	CD Direct Stand BY.	
	2 3 4 5 6	E307425-001 SBSG3006M E48729-009 EXO170005N35S02 E406481-001	Volume Knob Screw Plastic Rivet Felt Spacer Power Button	1 3 3 2 1		
	7 8 9 10	E75183-001 SBSG3008CC SBSG3008CC E406482-002 E406482-001	Head Phone Bracket Screw Screw Push Button Push Button	1 12 14 1		Except G , U G , U
	11 12 13 14 15	SBST3006CC E406483-001 E406483-002 E406484-001 E75527-006	Screw Push Button Push Button Push Button Push Button Knob	8 1 1 1 3	Cartridge Loudness CD Direct Tone	
	16 17 18 19 20	E406485-001 E307426-001 E102419-001 QSR2B16-E03 QSR2B19-E04	Knob LED. Holder Front Bracket Rotary Switch Rotary Switch	2 1 1 1 1	Source Select Rec Select	
	21 22 23 24	E206801-002 E26753-002 E61660-004 E306233-002 SBSG3008M	Metal Cover Metal Cover Special Screw Protect Sheet Screw	1 1 4 1 2		A,G E,EF,U,BS E,EF,U,BS
	25 26 27 28 29	E303216-006 E305811-002 E74266-002 E72018-001 E305812-002	Fastener Side Bracket Special Screw Wire Clamp Center Bracket	2 1 1 2 1	Right	
	30 31 32 33 34	E68587-008 E26273-003 E306816-001 EXO255005N60S02 E70115-002	Bracket Bottom Cover Fastener Spacer Caution Label	1 1 1 1 1		
	35 36 37 38 39	E307427-001 SBST3008Z E305810-001 E406309-001 E406626-001	Foot Ass'y Screw Side Bracket Spacer Protect Sheet	4 4 1 4 1	Left	
<u>A</u>	40 41 42 43	E305803-005 E61661-004 E73968-002 ETP1150-39EB ETP1150-39EBBS	Trans Bracket Special Screw Spacer Power Transformer Power Transformer	1 8 4 1	T001	A,E,EF,G BS
A A A A	44 45 46 47	ETP1150-39FA EXO060050N40S02 QMF51A2-2R5S QMF51A2-5R0S QMF51A2-2R5S	Power Transformer Spacer Fuse Fuse Fuse	1 1 1 1 1	for Transformer F001 F002	U U U A , E , EF ,G
Δ	48 49 50 51	QMF51E2-2R5SBS E307503-001 E48729-008 EXO020010R10S10 E26334-013	Fuse Protect Cover Plastic Rivet Spacer Rear Panel	1 1 2 2 1		BS A,E,EF,G,BS A,E,EF,G,BS U

♠: Safety Parts



Ŵ	Item	Part Number	Part Name	Q'ty	Description	Areas
	- 52 53	E26334-014 E303260-229 E73273-003 E73273-003 E70078-003	Rear Panel Rating Label Special Screw Special Screw GND. Terminal	1 1 9 2		Except U E , EF , G Except U U
	54 55 56	SDSG3008CC QHS3876-162 QHS3876-162BS QMP2560-244 QMP3900-200	Screw Cord Stopper Cord Stopper Power Cord Power Cord	2 1 1 1 1		U Except BS BS A E , EF , G
<u>^</u>	57 58 59	QMP7520-200 QMP9017-008BS E67000-005 GBSG3008CC WNS3000CC	Power Cord Power Cord Caution Label Screw Washer	1 1 1 22 4		U BS
-	- - -	E61029-005 E70028-001 E74792-086	Number Label Approval Label FTZ Label	1 1 1		U,A,BS E G

⚠: Safety Parts

The Marks Designated Areas

···the U.K. -- Australia --Germany --Continental Europe ----Other Countries No mark indicates all areas.

■AX-A442BK Parts List

Please refer to AX-A441TN parts list except following parts.

\triangle	Item	Part Number	Part Name	Q'ty	Description	Areas
	1 1-1 1-2 1-3 1-4	EFP-AXA442BKE E207078-002 E102418-002 E307424-003 E307424-004	Front Panel Ass'y Front Panel Front Base Side Fitting Side Fitting	1 1 1 1	Left Right	
	2 6 9 10 12	E307425-002 E406481-002 E406482-004 E406482-003 E406483-003	Volume Knob Power Button Push Button Push Button Push Button	1 1 1 1	SPK-2 SPK-1 Cartridge	
	13 14 15 16 21	E406483-004 E406484-002 E75527-004 E406485-002 E206801-001	Push Button Push Button Knob Knob Metal Cover	1 1 3 2 1	Loudness CD Direct Tone Source	A,G
	35 51 —	E26753-001 E307427-002 E26334-015 E26334-016 E303260-230	Metal Cover Foot Ass'y Rear Panel Rear Panel Rating Label	1 4 1 1		E , EF , U , BS U Except U E , EF , G
	_	E74792-087	FTZ Label	1		G

⚠: Safety Parts

The Marks Designated Areas

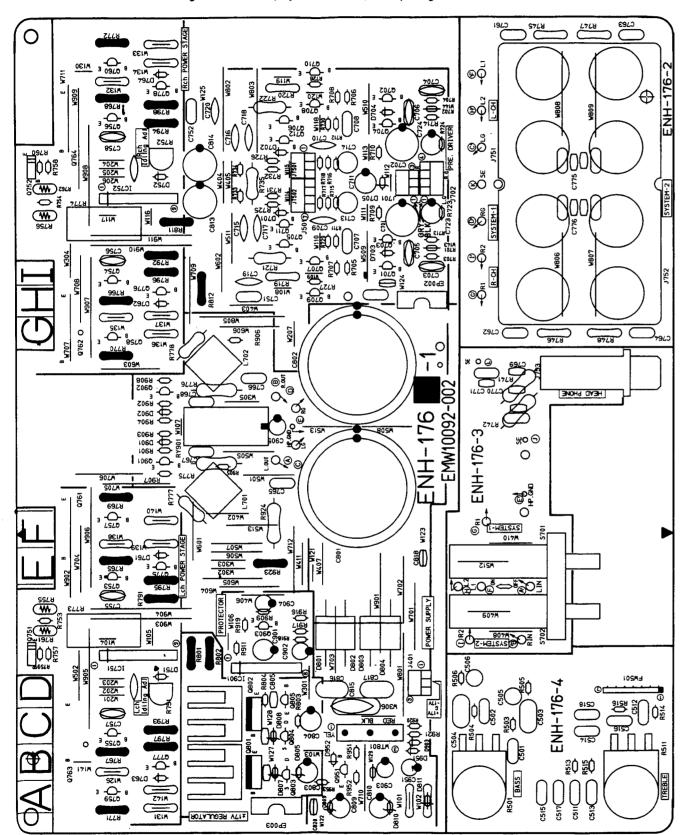
A.....Australia BS······the U.K.
U······Other Countries
No mark indicates all areas. ---Germany ---Continental Europe

(No. 20234) 2-4

Printed Circuit Board Ass'y and Parts List

■ ENH-176 Power Amplifier PC Board Ass'y

Note : ENH-176 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENH-176 E	Other Countries
ENH-176 F	Australia , Continental Europe
ENH-176 G	Germany
ENH-176 H	the U.K.

Transistors

_						_		_				_	
Δ	ITEM	PART	NUMBER	D I	E S	С	R I	Р	т	I	0	N	AREA
	Q701	250224	O(A,B)	SILI	CON		TOS	SHI	ВА				
	Q702		O(A,B)	SILI	CON		TOS	SHI	ВА				ļ
	Q703	25C224	0(A,B)	SILI	CON		TOS	SHI	BA				
	Q704		O(A,B)	SILI			TOS	SHI	ВА				1
			(GR,BL)										l
				SILI			TOS						
	Q707		(GR,BL)	SILI			TOS						1
i			(GR,BL)	SILI			TOS		ВА				
į			LN(R,S)	SILI	CON		RO						}
	Q710	2SA933	LN(R,S)	SILI	CON		ROI						l
	Q711	2SC224	O(GR/BL)	1277	COM		TOS	SHI	ВА				1
- 1	Q712		0(GR,BL)				TOS						
1				SILI			MAT						Ī
	Q752	2SD636		SILI			MAT		-	_	Α		
	Q753		O(GR,BL)										ļ
- 1			0(GR,BL)				TOS						i
	Q755	2SA970	(GR,BL)	SILI			TOS						
1			(GR,BL)	SILI			TOS						
			5(0,Y)	SILI			TOS	ÌΗ	BA				
	Q758	2SC223	5(0,Y)	SILI			TOS	IHS	ВА				
i		2SA965		SILI			TDS	SHI	BA				
ı		2SA965		SILI			TOS	SHI	ВА				
1	Q761	2SD215	5LB(R,0)	SILI	CON		TOS	SHI	ВΑ				
İ			5LB(R,0)				TOS	HI	ВА				
	Q763 ;	2SB142	9LB(R,0)	SILI	CON		TOS	IH:	ВА				•
- 1	G/64	258142	AFR(K*O)	シェニエ	. CUN		TOS	HI	ВА				
ļ	Q775	2SC174	OS (R.S)	SILI	CON		ROF	M					
1	Q776	2SC174	OS(R,S)	SILI	CON		ROF	M			••••		
ı	Q777	2SA933	S(R,S)	SILI	CON		ROF	M					•
- 1	Q778	2SA933	S(R,S)	SILI	CON		ROF	ΙM					
Ī	Q801	2SD206	1(E,F)	SILI	CON		ROF	ΙM					
- 1	Q802	2SB118	7(E,F)	SILI	CON		ROF	M					
	Q803	2SK246	(GR)	F.E.	T		TOS	HI	BA				
İ	Q804	2SK246		F.E.			TOS	HI	ВА				
1				SILI			ROF	!M					
-				SILI			ROF						
ĺ		2SC238		SILI			ROF	IM					
	Q903		(GR,BL)	SILI	CON		TOS		ВА				
	951	DTC114		SILI			ROH						
							11.00						

A : SAFETY PARTS

I.C.s

Δ	1	Т	ΕM	P	Α	R	Ť		N	Uì	vf	ВІ	ΞR		D	Е	s	С	R	:	ī	Р	Т	1	0	N		AREA
	ΙC	7	51 52 01		C:	50	2	2	(X	٠,				1	.0						10	IM IM						
		_								_	_			_		_			◭	•	S	:Ail	F:E	T:S	/: :	P:A	ιR	TS

Diodes

Δ	ІТЕМ	PART	NUM	BER	D	E	s	С	R	1	P	Т	I	0	N	AREA
	D701	188133			SIL	ΙC	ON			ROF	- M					
	D702	188133		-	SIL	IC	OΝ		1	ROF	M					l
	D705	MTZ18J	C		ZEN	ER			1	ROF	IM					ļ
	D751	188291			SIL	ΙC	ON		1	ROF	М					1
	D752	155291			SIL	ΙĊ	ON		7	201	1M					
	D761	155291			SIL	IC	ON			201	174					
	D762	188291			SIL	I C	ΩN			201	M					
	D763	188291		i	SIL	IC	ЯC			20:	114					
	D764	188291		į	SIL	IC	CN		1	105	13					
	0801	30DF2S	FC		SIL	IC	ON			4IV	101	IIN	TE	R		
	0802	30DF25	FC		SIL	IC	ÒŃ			III	101	IN	ΤE	R		
	D803	30DF2S	FC	ì	SIL	10	ON		1	VIH	101	IIN	TΕ	R		į
	D804	30DF2S	FC	1	SIL	IC	Ŋ		!	VIH	101	IIN	TΕ	R		
	D805	RD18JS	B3	i	ZEN	ΕR			1	LEC	;					ŧ
	D807	RD13JS	в3		ZEN	ΕR				1EC	:					ľ

Diodes

Δ	ITEM	PART NU	MBER I	E	s c	R I	P	Τ	I	0	N	AREA
1	D808	RD6.2JSB3	Z E	NER		NE	C					
l l	D809	MTZ20JC	ZE	ENER		RC)HM					
	D810	MTZ27JC	Z 5	ENER		RC	MH(
	D811	MTZ3.3JB	Z	NER		RC	MH					
ł	D901	1\$\$133	S	LIC	ON	RC)HM					i i
	D902	188133	51	LIC	ON	RC	HM					
	D903	188133	SI	LIC	ON	RC	MH					
	D951	188133	51	LIC	ON	RC	MH(
i	D952	188133	SI	LIC	0.0	RC	HM:					

ΙТ	ЕM	PART	NUM	BER	D	E S	; (R	I	Р	т	I	0	N	AR	ΕA
C 5			HK-15		+	15M		50V			'LA		_			
	02		HK-15			15M		50V			'LA					
	03		HK-82			82M		50V			LA					
C 5			HK-82 HM-47		4.7	82M	F	50 V 50 V			LA		LE			
C 5			HM-47		4.7	MF		50V					LE			
C 5	11		HK-33		330			50V			'LA]	
	12		HK-33		330		_	50V			LA					
C5			.HK-18 .HK-18			18M 18M		50V 50V			'LA 'LA					
C 5			HJ-22		220		I	50V			RA		С			• • • • •
C 5			HJ-22		220			500			RA		С			
C 5	- 1		HK-12 HK-12		120			50V 50V			LA LA				İ	
C7			06-22		122M	-		J (V			EC.		0		İ	
C7			06-22		22M	F		•••••	•••••		ΕC					
C 7			HJ-10		100			50V			LY					
C7			HJ-10		100			50V 50V)∟Y }∟Y				İ	
C7			HJ-10	_	100			50V			LY					
C7	07	QFN81	HK-33	2	330	OPF		50V		MY	LA	R				•••••
C7	08		HK-33		330	OPF		50V			LA		17.7	٨	CA	
C7			1J-10		1								IC.		CA	
C7	11	EEZ25	05-10	?	100	MF				EL	EC	TR	0		Ī	
C7			HM-47		4-7			50V					LE			
C7			HM-47		4.7 33P			50V 50V			N RA		LE		l	
C7			HJ-33		332			50 V			RA					
C7	17	QCS21	HJ-33)	33P	F		30 V		CE	RA	ΜŢ	С			
C7			HJ-330		339			50V			RA					
C7			HJ-220		22P			50V 50V			RA					
C7			05-10		100						EC				İ	
C7			05-10		100						EC					
C7			HJ-10		0.0			501			FI					
C7:			HJ-10: 1J-68		0.0	7 14 L		50V			FI LM		IC	A	CA	
C7			1J-68										IC		CA	
C7.			1J-680										I C		CA	
C7:			1J-680 HJ-103		0.0	1 M F		50V			LM FI		ΙÇ	Ą	C A	:
C 7			HJ-103		0.0			50V			FI				Ğ	
C74	- 1		HJ-10		0.0			50V			FΙ				G	
. C7			HJ-10:		0.0			50V			FΙ				G	
C74			HJ-104 HJ-104		0.1			50V 50V			FI FI					
C7	67	QFV81	HJ-104		0.1			50V			FΙ					
C 7			HJ-104		0.1			507			FI					
C7			HK-221 HK-221		220			50 V 50 V			RA				G	
67			EZ-22		0.0			257			RA				G	
C7		QCHB1	EZ-223	i	0.0	22M	F	25 V			RA				G	
C71			EZ-223		0.0			25 V			RA				G	i
C80	·····T		06-109		100			••	••••		EC			•••••		
C81			06-109 EM-47		100 47M			25 V			E C					
C8			EM-47		47M			25V			ΞC					
C8	05		HK-10:		100	ΡF		50V			RA					
C8			EM-470		47M 47M	F		25V 25V			EC					
C8			JM-22		220			63V			EC					
83	14	EETB1	JM-22	Έ	2201	ΜF		53V		ΕL	EĈ	ΤR	0			
C8:			EK-104		0.1			2501			MY		R		E	
C8			AK-10: AK-10:		0.0			100) 100)			LA				F	
C8		QFN32	AK-104		0.1			100	ſ	MΥ	LA	R			G	
83			AK-10		0.0			100			LA				Н	
C8:			AK-10: AK-10:		0.0			1001 1001			LA LA				- F	
C8			AK-10.		0.1			1001			ĽΆ		• • • • •		G	
C8:	17	QFN82	AK-103	3	0.0	1MF		1001		MY	LA	R			Н	
C8:			EZ-22		0.0			250			RA				G	
C9			AM-227 CM-226		2201 22M			10V 16V			EC					
C9			HM-47		4.71			50V	••••		EC					
C9	04	QETB1	HM-22	•	22M			50V		EL	ΕC	TR	0			
C 91	05		HM-109 HM-479		1MF 4.7			50V		ΕĻ	ΕC	TR TR			1	

Resistors

۵	lTEM	PART NUMBER	DES	CRI	PTION	AREA
	R501	QVD8876-E158	100K		VARIABLE	
	R503	QRD167J-203	20K	1769	CARBON	
	R504	QRD167J-203	20K	1/6%	CARBON	
	R505	QRD167J-362	3.6K 3.6K	1/69	CARBON CARBON	
	R506 R511	QRD167J-362 QVD887C-E15B	100K	1/69	VARIABLE	
	R513	QRD167J-47Z	4.7K	1/6%	CARBON	
	R514	QRD167J-472	4.7K	1/6W	CARBON	
	R515	QRD167J-821	820	1/69	CARBON	
	R516	QRD167J-821	820	1/6W	CARBON	
	R703	9RD167J-104	100K	1/6W	CARBON	
		QRD167J-104	100K	1/6W	CARBON	
	R705 R706	QRD167J-202	2 K	1/6W 1/6W	CARBON CARBON	
	R707	QR0167J-202 QR0167J-202	S.K	1/64		
	8708	9RD167J-202	SK	1/69	CARSON	**********
	2709	QRD167J-912	9.1K	1/69	CARBON	
	R710	9R0167J-912	9.1K	1/6%	CARBON	
	R711	QR0167J-101	100	1/68	CARBON	
	R712	GRD167J-101	100	1/69	CARBON	
۵	8713	QRV144F-3300		274₩	MIFILM	
۵	R714	QRV144F-3300	2.40	1/49	MIFILM	
ඨ	R715	QRV144F-1602	16K	1/48	M.FILM M.FILM	
Æ.	R716 R717	9RV144F-1602 9RV144F-8202	82K	1748	M.FILM	
<u>گ</u> گ	R718	QRV144F-8202	828	1/48	M.FILM	
as As	8719	GRD14CJ-121S	120	1/48	UNF.CARBON	
æ.	R720	@RD14CJ-121S	120	1/48	UNF.CARBON	
۵	R721	QRG012J-103AM	10%	1 W	O.M.FILM	
Δ.	R722	QRG012J-103AM	10K	1₩	O.M.FILM	
۵	8723	GRV144F-5600		1/4%	MIFILM	
۵	R724	GRV144F-5600		1/48	MIFILM	
	3725	QRD167J~391	390	1769	CARBON	
	2726	QRD167J-391	390	1/6%	CARBON CARBON	
	R728	QRD167J-152 QRD167J-152	1.5K 1.5K	1/6W 1/6W	CARSON	
	R729	QRD167J-333	33K	1/6%	CARBON	
	R730	0RD167J-333	33K	1/60	CARBON	
	R731	QRD167J-391	390	1/6W	CARBON	
	R732	QRD167J-391	390	1/6W 1/6W	CARBON	
	R733	QRD167J-158	1.5K		CARBON	
	R734	GRD167J-152	1.5K	1/6W	CARBON	
æ.	2735	QRG012J-392A	3.9K	1 🖟	O.M.FILM	
<u>ش</u> ه	R741	QRG022J-331A	330	ZW ZW	O.M.FILM O.M.FILM	
කී කී	R742 R745	QRG022J-331A QRZ0077-100	330 10	2W 174W	FÜSİBLE	Ğ
a a	8746	QRZ0077-100	10	1/4%	FUSIBLE	e e
Δ	3747	QRZ0077-100	10	1/48	FUSIBLE	G
ă.	8748	QRZ0077-100	1.0	1769	FUSIBLE	G
	R751	QVPE601-501	500	0.15₩	VARIABLE	
	3752	QVPE601-501	500	0.15W	VARIABLE .	
	R753	080167J-101	100	1/6W	CARBON	
	R754 R755	QRD1673-101 ERT-D2WFL351S	100 350	1/6W 1/4W	CARBON THERMISTOR	
	R756	ERT-02WFL3515	350	1/4%	THERMISTOR	
		y.,	1			
	8757	QRD167J-471	470	1/69	CARBON	
	R758		470 390	1/6W 1/6W	CARBON CARBON	
	R760	QRD167J-391 QRD167J-391	390	1769	CARBON	
	R761	ERT-DZWHLZOZS	2K	1/48	THERMISTOR	
	R762	ERT-DZWHLZOZS	2K	1/49	THERMISTOR THERMISTOR FUSIBLE	
à	R765	QRZ0077-122	1.2K			
خڭ	R766	QRZ0077-122	1.2K	1/4W	FUSIBLE	
Δ.	R767	QRZ0077-151	1.50	1/49	FUSIBLE	
<u> </u>	R768	GRZ0077-151	150	1/49	FUSIBLE FUSIBLE	
۵	8769	QRZ0077-100 QRZ0077-100	10		FUSIBLE	
ás. A	R770 R771	QRZ0077-100	10		FUSIBLE	
æ.	8772	@RZ0077-100	10	1/48	FUSIBLE	
۵. ۵.	R773	ERF032K-R22	0.22	39	CEMENT	
<u>.</u>	2774	ERF032K-R22	0.22	3 %	CEMENT	
ä.	2775	@RG022J-100A	1.0	29	O.M.FILM	
۵	3776	@RG022J-100A	10	2 / 2 1/2 1/2	O.M.FILM UNF.CARSON	
٨	R777	QRD125J-100	10	1/2W 1/2W	UNF.CARBON	
<u>۾</u>	R778	QR2125J-100 QRZ0077-621	950	1/4%	FUSIBLE	
ක. ක.	R791	QRZ0077-621	620	1/4%	FUSIBLE	
an. Ad	R793	QRZ0077-621	620	1/48	FUSIBLE	
a a	8794	QRZ0077-621	620	1/48	FUSIBLE	
a.	R795	QRZ0077-151	150	1/48	FUSIBLE	
٨	R796	QRZ0077-151	150	3.74W	FUSIBLE	
å.	R 797	QRZ0077-151	150	1/48	PUSIBLE	
A.	R798	QRZ0077-151	150	1/48	FUSIBLE	
ش	R801	QRI0077-100	10	1/48	FUSIBLE FUSIBLE	
A.,	2802	QRZ0077-100	10 16K	1/4W. 1/6W	CARBON	
	R803	QRD167J-163 QRD167J-203	SOK	1/68	CARSON	
â	R804 R811	QRZ0077-330	33	1/48	FUSIBLE	
	1.00					
ana An	2812	0820077-330	33	1/4%	FUSIBLE	

Resistors

A	ITEM	PART NUMBE	ER DRS	5 C R I	PTION	AREA
				************	CARBON	
	R902	QRD167J-272	2.7%	1/6W		
	8903	QRD167J-153	15K	1/6W	CARBON	
	8904	QRD167J-153	1.5 K	1/6W	CARBON	
	R905	QRD167J-104	100K	1/6W	CARBON	
	R906	QRD167J-823	82K	1/68	CARBON	
	R907	QRD167J-223	22K	1769	CARBON	
	R908	QRD167J-223	25K	1/6W	CARBON	
	R909	9RD167J-103	10K	1/6₩	CARBON	
	8911	QRD167J-473	47K	1/6₩	CARSON	
	R916	QRD167J-103	10K	1/6W	CARBON	
	8917	QRD167J-103	10K	1/6₩	CARBON	
	R918	QRD167J-224	220K	1/6%	CARBON	
	R919	QRD1673-332	3.3K	1/6W	CARBON	
	8920	QR0167J-273	27K	1/6W	CARBON	
	8921	GR0167J-103	it.ok	1/69	CARBON	
ىگ	8923	QR014CJ-820S	32	1749	UNF.CARBON	
A.	R924	QRG022J-122A	1.2K	28	O.M.FILM	
	8951	QRD167J-224	220K	1/6W	CARBON	
	R952	QRD167J-333	33K	1/69	CARBON	
	R953	QRD167J-101	100	1/6W	CARBON	

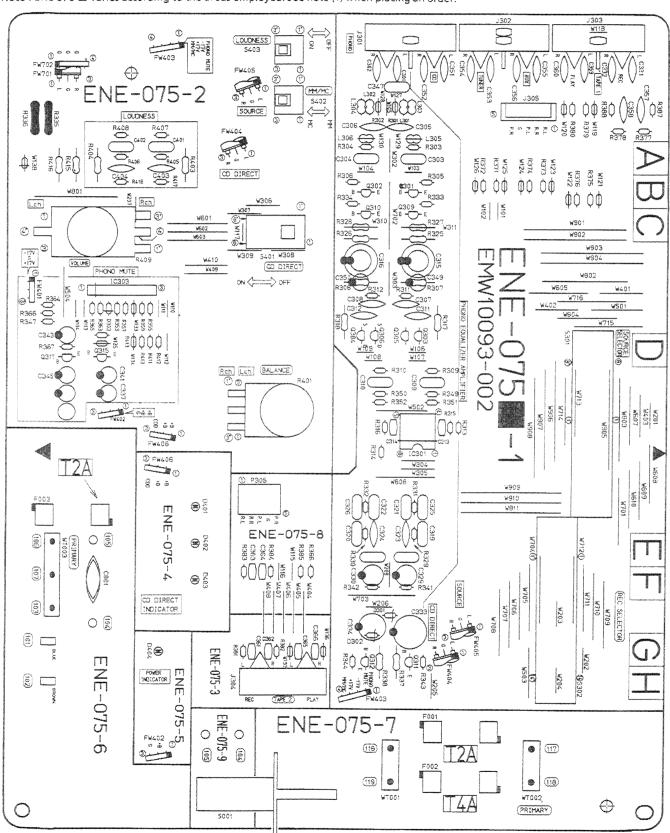
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Others

å	ITEM	PART NUMBER DESCRIPTION	AREA
****		EMW10092-002 PRINTED BOARD	
		E300209-040 RADIAT.PLATE	
		E305804-001 HOLDER	
		E305005-001 HOLDER	
	1	E33754-001 TIE BAND	
		E70945-H25 HEAT SINK	
		E73525-001 SPECIAL SCREW	
	-	E73525-003 SCREW	
		SBSG3008CC SCREW	
		Gase3008CC SCREW	E
		6586300800 SCREW	
		ENTO11-078 TERMINAL WIRE	6
		EWT011-112 TERMINAL WIRE	6
		E74266-002 SPECIAL SCREW	6
		GBSG3008CC SCREW	G
		68863008CC	8
	J401		ĺ
		EMV7122-105 CONMECTOR(3PIN)	
		EMY7122-004 CONVECTOR(4PIN)	
	J 751	SKBOOTP-8010 SPEAKER TERMINAL	ļ.,
		EMBOOTP-8010 SPEAKER TERMINAL	
		GMS6A40-021 HEADPHONE JACK	
		EQLOGGI-180 INDUCTOR	
		EQLOOG1-1RO INDUCTOR	
	S701	QST4241-EO7 PUSH SWITCH(SPXI)	
		GST4241-E07 PUSH SWITCH(SP82)	
		E70859-001 EARTH PLATE	
	EP003	E70859-001 EARTH PLATE	G
	F#501	EWR375-13LST FLAT WIRE(TPIN) EMV7122-103 CONNECTOR(SPIK)	
	UT501	LMV/122-103 CONNECTOR(3F18)	ļ
	JT502		
		ESK7D24-2120 RELAY	
	WT801	E67764-103 VRAPPING TERMINAL(3PIN)	:

■ ENE-075 Source Selector PC Board Ass'y

Note: ENE-075 ☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENE-075 [E]	Other Countries
ENE-075 [E]	Australia , Continental Europe
ENE-075 🗓	Germany
ENE-075 HBS	the U.K.

Transistors

Δ	LTEM	PART NUMB	ERDES	RIPTIC	O N AREA
	Q301 Q302	2SD655(ExF) 2SD655(ExF)	SILICON SILICON	HITACHI HITACHI	
	@303	2SK170(BL)	F.E.T	TOSHIBA TOSHIBA	
	Q304 Q305	25K170(BL) 25K170(BL)	F.E.T F.E.T	TOSHIBA	
	0.306 0.309	28K170(BL) 28D655(ExF)	F.E.T SILICON	TOSHIBA HİTACHI	
	9310 9311	2SD655(E/F) 2SC2878(A/B)	SILICON SILICON	HITACHI TOSHIBA	
	Q312 Q315	2SC2878(A/8)	SILICON SILICON	TOSHIBA ROHM	
*	6317	DTA1448S	SILICON	ROHM	

A ESAFETTY PARTS

I.C.s

A ITEM	PART NUMBER	D S S	CRIPTION	AREA
	VC4580DD UPC1237HA	I.C.	DAINICHI NEC A PESAPETYY PAR	(TS

Diodes

A LIEM	PART NUMBER	DESC	RIPTIO	N AREA
D302 D3303 D3301 D402 D403 D404	RD15JSB3 1SS133 SLV-31YC3F SLV-31YC3F	ZENER ZENER SILICON L.E.D. L.E.D. L.E.D.	NEC NEC ROHM ROHM ROHM ROHM ROHM	

AUSAFETY PARTS

Capacitors

2	ITEM	PART	NUMBER	DES	CRI	PTION	ARBA
æ.	0001	QCZ905	0-472A	4700PF		CERAMIC	ş
a	0001	QCZ905	0-472A	4700PF		CERAMIC	G
a. I	0001	QCZ905	0-472A	4700PF		CERAMIC	888
	0.301	QCS21H	J-101	100PF	50V	CERAMIC	G
	0302	QC\$21H	J-101	100PF	50¥	CERAMIC	G
	0303	QFV81H	J-103	0.01MF	50 V	T.FILM	E
	0303	QFV81H	J-103	0.01MF	50V	T.FILM	F
1	0303	QFN81H	J-102	1000PF	50 V	MYLAR	G
***************************************	0.303	QFV81H	J-103	0.01MF	50V	T.FILM	HBS
-	0304	QFV81H	J-103	0.01MF	50V	T.FILM	E
	0304	QFV81H	J-103	0.01MF	50 V	T.FILM	
	0304	QFN81H	J-102	1000FF	50 V	MYLAR	G
	0304	QFVS1H	J-103	0.01MF	50V	T.FILM	HBS
	0.307	QCS21H	J-101	100PF	50V	CERAMIC	
***	0308	eCS21H	J-101	10005	50V	CERAMIC	
	0.309	GFNS1H		2200PF	504	MYLAR	
-	0310	QFN31H	J-222	2200PF	50V	MYLAR	
-	C311	QCS21H	J-680	68PF	SOV	CERAMIC	Ε
	0311	QCS21H	J-680	68PF	50 V	CERAMIC	F
-	0311	QCS21H	J-680	68PF	SOV	CERAMIC	HBS
	C312	QCS21H		68PF	50V	CERAMIC	Ξ
	C312	9CSZ1H	J-680	68PF	50V	CERAMIC	۶
4	C312	QCSZ1H		68PF	50V	CERAMIC	HBS
-	0315	EEZ060		220MF		ELECTRO	
	C316	EEZ060		220MF		ELECTRO	
	C319	QFN81H		4700PF	50V	MYLAR	
	0320	QEN818		4700PF	50V	MYLAR	
	0321	QFN81H		0.015MF	50V	MYLAR	
3	0322	QFN81H		0.015MF		MYLAR	
-	0323	QCS21H		330PF	50V	CERAMIC	
	0324	QCS21H		330PF	50V	CERAMIC	
-	0325	QFN81H		2700PF	50V	MYLAR	
1	C326	QPN816		2700PF	50V	MYLAR	
1	0329	882500		10MF		ELECTRO	
- 1	0330	EEZ500		10MF		ELECTRO	

Capacitors

۵	ITEM	PART NUMBER	DES	CR:	PTION	AREA
	0331	QCS21HJ-101	100PF	50 V	CERAMIC	G
	0332	QCS21HJ-101	100PF	50 V	CERAMIC	G
	0333	EEZ2505-227	SSOME		ELECTRO	
	0334	E8Z2505-107	100MF		ELECTRO	
	0337	@EK51CM-226	22MF		ELECTRO	
	0341	QEKS1HM-475	4.7MF	50 V	ELECTRO	
	0343	QEK51EM-475G	4.7MF	25 V	ELECTRD	
1	0345	QEK51HM-106	10MF	SOV	ELECTRO	
	0347	QFV81HJ-103	0.01MF	50V	T_FILM	
	0351	QCS21HJ-101	100PF	50V	CERAMIC	G
	0352	QCS21HJ-101	100PF	50 V	CERAMIC	G
	0353	QCS21HJ-101	100PF	50V	CERANIC	6
	0354	QCS21HJ-101	100PF	50 V	CERAMIC	G
	0355	QCS21HJ-101	100PF	50 V	CERAMIC	G
	0356	QCS21HJ-101	LOOPF	SOV	CERAMIC	S
	0359	QCS21HJ-101	10077	50 V	CERAMIC	G
	0360	GCS21HJ-101	100PF	50 V	CERAMIC	G
	0361	QCBB1HK-101	100PF	50 V	CERAMIC	6
	0362	QC381HK-101	100PF	50 V	CERAMIC	G
	0365	QCBB1HK-101	100PF	50V	CERAMIC	
1	0366	QCBB1HK-101	100PF	50 V	CERAMIC	G
	0401	QFV81HJ-563	0.056MF		T.FILM	
-	0402	QFV81HJ-563	0.056MP	50V	T.FILM	
	0403	QCS21HJ-471	470PF	50 V	CERAMIC	
	C404	QCS21HJ-471	470PF	50 V	CERAMIC	

A ISAFEDY PARTS

Resistors

3	ITEM	PART	NUMBER	DES	S C R	I P	TI	O N	ARE
	R301	QRD167	J~102	1 K	1/69		RBON		G
	R302	QRD167	J-102	1K	1/69	C.F	REON		6
	8303	QRD167	U-101	100	1/6₩	CA	RBON		-
	R304	QRD167		100	1/6₩	CA	REON		
	R305	QRD167		10K	1/69	CA	RBON		
***	R306	QRD167	'J-103	10K	1/6%		RBON		1
	R307	ERDO03		10	1/4W		NOBBA		ì
	R308	ERDOOS		10	1/4W	C.A	ARBON		
	R309	QRD167		68	1/69		RBON		1
	R310	QRD167		68	1/69		RBON		Ì
	R311	0RD167		47K	1/6W		RBON		i
				47K	1/6₩		RBON		i.
	R312	9RD167			1/6%		RBON		
	R313	980167		4.7K					į
	8314	QRD167		4.7K	1/6%		REEN		
	R315	QRD167	Y-478	4.7K 4.7K	1/6¥ 1/6¥		REON		ļ
	8316	QRD167					REON		
	R317	ER0003		4.7%	1/4W		RBON		
	2318	ER0003		4.7K	1/4W		RBON		
	8325	ERDOGE	J-180	18	1/4W	C.A	REON		
	R326	ERDO03	SJ-180	18	1/4W	CA	RBON		
	R327	ERDOOS		5.50	1/4W	CA	RBON		1
	8328	ERDOOS		220	1/4W	C/	RBON		
	8329	QRD167		15K	1/69	C.A	RSON		
	8330			15K	1/6W	C.A	RBON		
	R331		F-1913A	191K	1/4₩		FILM		
	78332		F-1913A	191K	1/4₩	W	FILM		
		QRD167		ick	1/6W		RBON		
	8333	QRD167		10K	1/6W		RBON		
	R334	QRZO07		100	1/4%		SIBLE		
2	R335				1/42		SIBLE		
è.,	2336	QRZO07		180 470					
	8337	ERBO03			1/4W		NOSRA		
	8338			470	1/4W		RBON		
	2341	QRD167		100K	1/6W		REON		
	R342	980167		100K	1/6%		RBON		
	2343	080167		10K	1/6%		1890N		
	2344	980167		10K	1/6%		REON		
	2347	QRD167	3-474	470K	1/6W		REON		
	8349	QRD167		1.2M	1/6W		RBON		
	8350	QRD167	'J-125	1.2M	1/6%		RBON		
	R351	QRD167		1.2M	1/6₩		RBON		
	2352	QRD167	7]-125	1.2M	1/6W		RBON		
	8353	280167		4.7K	1/6W		RBON		
	R355	QRD167		3.9K	1/6W		RBON		
	R357	QRD167		1.5K	1/6W		REON		
	R359	QRD167			1769	C.A	REON		
	R363	QRD167		47K 100K	1/6%		RBON		
	R364	QR0167		100K	1/6W		RBON		
		080167		100K	1/6%		RBON		
	R365			470K	1/6W		RBON		
	R366	QRD167							
	R367	080167		47K	1/6₩		RBON		
	2371	QRD167		470K	2/6%		RBON		}
	8372	089167		470K	1/69		REON		
	2373	QRD167		470K	1769		RBON		-
	8374	QRD167	73-474	470K	1/6%		LRBON		*
	R375	980167	73-474	470K	1/6W	C/	RBON		l
				.704	0.200	×	ODON		
	2376	QRD167		470K	1/69		RBON		1
	R377	980167		1M	1/69		RBON		
	2378	QRD167		1M	1/6%		RBON		
	R379	QRD167	3-474	470K	1/6W		RBON		Ì
	2380	QRD167	71-176	470K	1/6W	P A	RBON		1

AX-A441TN AX-A442BK

Resistors

Δ	ITEM	PART	NUMBER	DE	SCR	l P T	10	N	ARI	EΑ
	R381	QRD167	J-331	330	1/6	W CAR	BON			
	8382	QRD167	J-331	330	1/6	# CAR	BON			
	2383	QRD167	J-105	1M	1/6	# CAR	BON			
	R384	QRD167	J-105	1 M	1/6	d CAR	BON			
	R385	QRD167	J-474	470K	1/6	/ CAR	BON			
	R386	QRD167	1-474	470K	1/6	CAR	BON			
	8387	QRD167	J-331	330	1/6	√ CAR	BON			
	8388	QRD167	J-331	330	1/6	₹ CAR	BON			
	R401	QVDB87	M-EF5B	250K		VAR	IABLE			
	R403	ERD003	J-103	10K	1/4W	CAR	BON			
	R404	ERD003	J-103	10K	1/4W	CAR	BON			
	R405	QRD167	J-623	62K	1/6	CAR	SON			
	8406	QRD167	J-623	62K	1/6	/ CAR	808			
	8407	QRD167	J-474	470K	1/69	CAR	BON			
	R408	QRD167	J-474	470K	1/69	CAR	BON			
	R409	QVD890	8-E158	100K		VAR	IABLE		.,,,,,,,,,,,	*****
	R411	QRD167	J-331	330	1/6)	CAR	BON			
	R412	QRD167	J-331	330	1/6	CAR	BON			
	R413	QRD167	J-681	680	1/64	CAR	BON			
	R414	QRD167	J-511	510	1/6	CAR	BON			
	8415	ERD003	J-821	220	1/4W	CAR	BON		********	
	8416	ERD003	J-221	220	1/4W	CAR	BON			
	R417	QRD167	J-333	33K	1/69	CAR	BON	1		
	8418	GRD167	J-333	33K	1/69	CAR	BON	, in		
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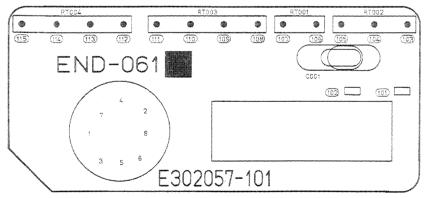
#### Others

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#### Others

Á	ITEM	PART	NUMBER	a b	E	S	C	R	ī	30	T	I	0	N	A.	REA
		E65508	3-002	TAE									••••••		1	HBS
	F001	E67132		FUS	Ξ	LA	BE:	Ĺ.								Ξ
		E67132		FUS												Ε
	F003	867132	2-T2RS	FUS	Ξ	LA	BE	_								۳
	F003	E67132	2-T2R5	FUS	Ξ	LA	8E									G
	F003	E67132	-T2R5	FUS	Ξ	LA	BE:	_						.,,,,,,		HB\$
	J301	EMNOQ	V-406A	4.2												
	J302	EMNOOT	V-404A	4,0	Pĭ	N.	JAI	٥K								
		EMNOOT	V-404A	4 P	PI	Ν.	JAI	CK								
	J304	EMNOOT	V-404A	4.9	PI	N.	JAI	CK								
	J 3 0 5	EMV512	5-005	PLU	G.	AS:	SY	(3P	13	)```				,,,,,,		*******
	L301	EQL400	4 - 330	END	UC	TO	2									6
	L302	EQL400	4-330	IND	UC.	TO	₹								*	G
	L303	EQL400	4-330	IND	UC.	TO	ę									G
	L304	EQL400	4-330	IND	uc.	TO	2									G
			5-005R	CON	NE	CT	ÖR	50	IN	)```	****				1	
۵		QSP110		POW												Ξ
			6-004	POW	28	Si	åI.	TCH	i							F
۵	S001	QSP110	6-004	POW												G
	8001	QSP403	1-60388	PUS	8	SW:	170	18								HBS
	8301	QSS1R2	8-E01	SLI	DΞ	S	VI.	CH	7 S	οĸ	R C	8	SEI	EC		
-		QSS1R4		SLI												
		QSTL10		PUS										•		
			1-E03	PUS									• /			
-	FW401	FWPTTP	-13: CT	ier s							٧,					
	F¥402	EWR338	-16887	FLA	÷ ;	. T F	=	3 P	î.	Ş						
		EWR348		FLA												
		EWR230		FLA												
		EWR230		FLA												
			-13SST													
		EWR230		FLA												
			-16LST	FLA												
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		E67764		WRA												F
			-503 -703	WRA												Ġ
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*																

### ■ END-061 B Voltage Selector PC Board Ass'y (Only for Other Countries)



#### Capacitors

Δ	ITEM	PART	NUMB	ER	D	E	s	С	R	ī	P	7	I	0	N	ARBA
Δ	2001	0.0290:	18-103		0.0	1M	۶				CE	RA	MI	С		
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#### Others

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A TESA FERRY PARTS

## Accessories List

	Part Number	Part Name	Q'ty	Description	Areas
***************************************	E30580-1712A E30580-1712ABS E30580-1717A BT-20117 BT20060	Instruction Book Instruction Book Instruction Book Warranty Card Warranty Card	1 1 1 1 1		U,A,E,EF,G BS E,EF G BS
	BT-20122 BT-20122-1 BT20066A E43486-340A QZL1008-001	Warranty Card Sticker EEC Agency Safety Sheet FTZ Information Sheet	4 4 4 4 4		A A BS BS G
	E04056 E35497-019 E41202-2 E41202-2B	Siemens Plug Caution Sheet Envelope Envelope		220V	U U Except BS BS

⚠: Safety Parts

The I	Vlarks	Designated	Areas
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Α	·····Australia	
G	····Germany	
E.E	FContinental	Europe

BS------the U.K.
U-----Other Countries
No mark indicates all areas.

## **Packing Materials and Part Numbers**

